



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III  
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(Red)

DATE : August 3, 1987  
SUBJECT: Comments on Additional Submissions (July 1 to July 31, 1987) for  
Avtex Fibers Site QAPJP  
FROM : Diana Pickens (3ES23) *DP*  
Chemist  
TO : Ruth Rzepski (3HW16)  
Compliance Officer  
THRU : Pat Krantz (3ES23) *PK*  
Chief, Quality Assurance Section

This report summarizes events and comments since my May 7, 1987 memo. The following documents (listed by G&M document control number) were reviewed:

7-1-87-3	Comments and Avtex lab documentation
7-16-87-1	Cambridge Analytical Associates QAPJP
7-30-87-1	Deletion of the solubility range test
7-31-87-1	Revised list of analyses to be performed in-house by Avtex and revised field preparation and preservation

- o As per the conversation 7/31/87 between Michele Ruth and Diana Pickens, five parameters were deleted from the document 7-1-87-3: conductivity, lead, ammonia nitrogen, oil and grease, and sulfide.
- o The documentation provided for the in-house methods is inadequate to determine technical adequacy. Table 1 is provided which contains minimum performance criteria to be used for these methods.
- o The calculations presented are either incorrect or ambiguous. All raw data and calculation equations must be supplied to allow an independent verification of the results. Quality control samples from EPA EMSL-Cincinnati are included in this table as requirements. The results of each QC sample must be submitted in the routine project status reports.
- o The analysts need to take special precautions to ensure the sample results are within the range of the methods. There was insufficient information presented to predict whether a problem is expected at this site. Since the treatability study may involve analysis of a wide range of concentrations, the analysts need to be aware of the potential problem.

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6/11/91  
(KCC)

In general, the documentation provided for the geotechnical work is sufficient. The QC and notes provided on the attached table must be incorporated into the work done in the Avtex lab. Then the QAPJP will be completely approved. If you have questions or comments on this report, please call me.

Enclosure

DP:wbg:QA E-mail #1

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Minimum QC procedures to be followed has been developed. The calibration and QC data will ensure that "trends" are, in fact, attributable to the treatment and not method variability.

Minimum Performance Criteria to Determine Technical Adequacy									
Operation	BOD5	COD	ISS	TS	TVS	Zn(5)	pH	DO	O2 Uptake
Equipment Calib.									
Initial Std. Calib.	DO Meter(2)	Balance Oven(3)				AA(2)	pH meter(2)	DO meter(2)	Minimum Frequency
Calibration Verif.	X titrant Standardized Daily					3 stds. & blank daily; match acid matrix to sample; r > .95	2 Buffers		With Each use
Cont. Calib. Verif.		X QC(1) Sample				X QC(1) Sample	X QC(1) Sample		1 per initial calib.; independent source
Preparation Blank						X (+10%)	X (+0.1 units)		1 per 10 samples or every 2 hrs., whichever is more frequent
Duplicate	X (+20 PRD)	X (+20 PRD)	X (4)	X (4)	X (4)	X (+15PRD)	X (+0.1 units)		1 per matrix, batch or no sample, whichever is more frequent; must be < method D.L.
Matrix Spike						X (+15%)			Same
Other	1. Glucose glutamic acid test 2. QC(1) Sample	1. QC Sample (1)							Same

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Indicates operation to be performed. EPA or commercial source; an acceptable response is within the 95% confidence limits. Calibrate with each use, following manufacturer's instructions. Check analytical balance with each use with Class S weights to bracket the range of sample weights. Monitor the temperature and humidity of the balance room. Precision is dependent upon concentration; duplicates should be within +20% at sample concentrations up to 100 mg/L and +10% above 100 mg/L.